OCCASIONAL PAPERS

ERRATUM SHEET
for

Student Access to Libraries
and Library Resources
in Secondary Schools

No. 97

by Lawrence H. McGrath
not McGarth

December 1969

THE LIBRARY OF THE
JAN 12 1970
UNIVERSITY OF ILLINOIS
INTRODUCTION

Research in school library service has been largely concerned with library materials, library organization, service to readers, circulation of resources, design of quarters, and staffing. However, to use library facilities and services the student must have access to them. Little published research is available on the relationship of patterns of school organization and student access to school library resources and services.

This paper seeks to explore the concept of access and its characteristics and, in the light of accepted library standards, to examine the present status of access in secondary schools in the United States, as described in published information in books and periodical articles. An overview of the changing secondary school environment is presented and the major current educational innovations are discussed. This overview provides a background against which some consideration is given to the responses by school libraries in secondary schools which have introduced new patterns of school organization. Some of these responses are more successful in achieving effective access and use of school libraries than others;
such responses may offer guidelines for planning in schools which are about to initiate programs of educational reorganization.

Primarily concerned with access this paper gives only marginal attention to use of areas and resources. Access by large or small groups is considered, but, emphasis is placed on access by individuals. The survey is concerned with secondary schools covering all or some of grades seven through twelve in the United States, but no attempt is made at national coverage or representative sampling.

Terminology used to describe what was formerly universally known as a school library posed some problems. In this paper the term "school library-media center" is used to emphasize the multi-media, multi-service roles of this facility, but the shortened form "school library" is also frequently employed with the same connotation. Each of these terms should be considered to include the rich variety of descriptions given to the school library as a "materials resource center," "discovery center," "learning resource center," "instructional materials center," "media center" and "educational resource center" in secondary schools in the United States today.

An obvious beginning in any program for school library reorganization is an accurate and objective survey of the present position. The questionnaire presented in the appendix is one way in which this picture of current access and use may be obtained. Awareness by media specialists of the nature of access and of those factors which produce efficient and satisfying student access to services and resources is considered essential if library-media centers in secondary schools are to contribute effectively to the exciting changes in the education of today and tomorrow.

THE CONCEPT AND COMPONENTS OF STUDENT ACCESS

Access to the resources of school library-media centers is clearly a prerequisite to their use. This access to the resources in schools today generally, but by no means always, requires access to the areas in which the materials, and in some cases the associated equipment, are organized and housed. Developments in electronic communication and information retrieval systems may well eliminate, or reduce, the necessity to have physical access to a location in order to make use of the information contained in the resources of school libraries. Extra-mural touch-tone telephone access to school information retrieval systems from the students' homes was initiated in two suburban areas of Chicago, during 1968. Multi-school, district-wide, and regional access to information, rather than to the resources possessing this information, are real possibilities for school libraries in the comparatively near future.

School policy and organization and the systems, services and procedures of the library determine the extent, variety and ease of student access to resources. Effective access today implies not merely that students are permitted to go to study areas and information centers, but that they may proceed conveniently and efficiently--drawn to the center's resources rather than drafted to the area as a period location--and with the minimum number of barriers or deterrents imposed by the school or introduced by the library.

The necessity for library-media centers, possessing adequate materials, and with sufficient and diversified staff to acquire and organize resources and guide, service, and control such centers has long been recognized and considerable progress has been made towards the achievement of these standards in secondary schools.
What has not been clearly seen, however, by many administrators is that these provisions are not enough. Excellent standards of these bases for service, even when supported by imaginative library planning and programs, are of little value unless students have real access to both resources and services.

It must be recognized that the environment in which the school library and resource centers function is not determined by the library but by the administrators and teaching staff of the school. It is this total school environment which determines whether the library's resources and services will be available to and will be used by the students. Libraries and resource centers are accessible rather than merely "not closed" when the administrators, teachers, librarians and students desire this and make them so.

The answers to the following questions point to some of the most important features of library accessibility. What makes library resources truly accessible? How and when can students gain easy access to the area and to the services. What opportunities are provided for whole class groups, small working groups and individual students to utilize the resources when it is convenient for them?

An accessible library is an open library. A school library providing full access is open before school and after school, during all student lunch hours and throughout the scheduled school day. According to need as well as demand it is open during a number of evenings each week, on Saturdays, and during the summer vacation with special provision for the summer school sessions.

For maximum access the library is located proximate to student-used areas, including student arrival and recreational areas, adjacent to the major class teaching rooms and laboratories, and close to other study areas and learning centers. The library must therefore be "centrally located." However, it is equally imperative that the library be planned so that it may be utilized at times when the remainder of the school is closed to students, and that its central location does not inhibit the expansion which growth of resources and diversification of services will make essential.

Opportunities for use of resources are made realizable where enough space, varied in purpose, is available to meet student needs, with not only sufficient seats but also an adequate number of equipped single study carrels for all the students who might wish to use them at any one time. Space for the range of equipment produced by educational technology and for its efficient use by individual students is as essential as the adequate staff needed to provide assistance and guidance and the efficient organization which should encourage uninterrupted reading and effective study by students.

Resources themselves should be equally accessible, including non-book materials in all media forms. Open stacks of resources revealed by accurate indexes, logical organization and lucid guides maximize student choice of materials. Establishment of reserve sections and limited loan periods would be designed in relation to, and evaluated in terms of success in achieving increased accessibility for an optimum number of users. Variable and individually flexible loan periods according to the types of materials and the needs of users encourage use by minimizing restrictions on access. Loans to classrooms, resource centers and study areas, and overnight, two-three days, weekly, long term, short vacation and summer circulation of items should be developed and their effectiveness continually assessed in the light of the principles discussed above.
Useful access to many audio-visual resources will require access to the associated equipment. Home use of certain resources may also require the loan of projection or reproduction equipment for use with the materials at home. With new developments in educational technology continuously modifying traditional forms of information resources and introducing new carriers of knowledge it is important to consider that today, as well as in the future, the desirable access is the access to information and services and not to one or more traditional library locations. It has been suggested that dial access may link the user within and outside the school with school and public library information retrieval centers. Location of the user and time of the day may well cease to be important. What will matter will be the accuracy, recency and completeness of the information and the efficiency of the audio and video communication links which will present information to the student.

Effective access, however, requires not merely the existence of facilities but also the absence of barriers to realization of opportunities for entry and use of resources. These barriers may be introduced or produced by the school, the teachers, the library or the students.

School policy, curriculum and course requirements, inflexible scheduling, examination pressures and restrictions on student movement may be deterrents to library access. Teachers may be unwilling to take groups to the library or permit students to go for individual study in class time. Over-teaching and textbook-centered learning may consume the student's time and leave little time for the use of information resources in library-media centers. Library-introduced deterrents probably include those less easily recognized by many school librarians, e.g., inflexible library rules and restrictive circulation policies. Students too, may create barriers by the development of a peer group antipathy to the use of the library or desire for its resources. More common perhaps are the time demands of student extra-curricular activities which often use all the time between the arrival and departure of school buses and the actual school day.

Finally, barriers to access may develop from the introduction of innovative educational changes which, while desirable in themselves, do not consider the impact on other practices of continuing value in the school. No school provision may be made for new library needs in the new situations resulting from change and the library may be equally unprepared to plan creatively for new patterns of service. It may well be that some of the "library problems" which resulted from the cessation of study hall periods and the introduction of modular scheduling proceeded from these causes.

Accessible library-media centers and resources are characterized by planned and positive provision, by the absence of deterrents and barriers, by supportive school policies, by accepted educational objectives, by the continual evaluation of current opportunities for access and by the willingness to modify these modes to meet new teacher requirements and learner needs.

STANDARDS AND PRESENT STATUS OF ACCESS

How accessible are secondary school libraries at the present time in relation to adopted standards and accepted concepts of access? The American Library Association's Standards for School Library Programs, (1960) has a chapter on "Making Materials Easily Accessible in the School" which considers the roles of school
library policies and services, the organization of materials and the school library quarters. Reference is made to other sections which discuss staff requirements, functional arrangements of library accommodation and the adequacy of efficiently organized resources.¹

Principles and practices discussed under the section "School Library Policies and Services that Make Materials Easily Accessible" include the following recommendations:

The school library is available for use by individual students and by class groups throughout the school day...for the student to have quick and easy access to the library from the classroom or from the study hall.... The school library is open before and after school...at least one-half hour before classes begin and at least one hour after classes end...during the school year, libraries should be open for use on Saturdays...and high school libraries should be open at night.... All materials are made easily available for use in the library...are continuously sent to the classrooms for short-term loans...and for long-term...loans...the resources of the library are easily available for home use. The policies...for the circulation of materials are liberal and flexible.²

"Design for Good Services," the section which discusses the planning of school library quarters, postulates that:

In order that good service may be provided, the library quarters must be easily accessible, large enough...and planned for the comfort and convenience of its users...the school library is located for maximum accessibility...conveniently situated in relation to study centers, the center of classroom traffic, and the various divisions of the school...any extended library program, with service continuing during summer months, evening hours, or other times, requires a location for the library...that allows for separate custodial maintenance and supervision at these times...if all students and teachers are to receive library service, the library area or areas must be large enough to accommodate them...and to house the collection of materials required for the needs of the students and faculty and to provide for the effective and convenient use of these materials.³

In the light of these Standards what is the present status of access to library-media centers and their resources? From an intensive search of the available literature it appears that there are no published, current, general overviews of this issue on a national or regional scale and that while nationwide surveys have included aspects of the problem of access, the information provided is no longer current. Surveys of samples of schools by the United States Office of Education and the National Education Association, and detailed investigations in one or a small number of schools provide useful indications or illustrate developmental trends. However, as patterns of access in the more effective or innovative schools are probably more frequently reported, accounts of practices in selected schools should not be considered as necessarily presenting the practice in the majority of schools. Full information on the status
and trends in this vital aspect of school library organization and service is clearly not available. Access to school library-media centers in various educational environments warrents the kind of comprehensive and sustained research not now available if individual schools and systems planning educational innovations are to anticipate likely effects and to modify library services with a knowledge both of present patterns of access and use and the results of similar changes on libraries in other schools.

However, from the information published it appears that secondary school libraries are much less accessible--and much less used--than they might be, even within present educational environments. School policy and organization, teacher indifference, library inflexibility and inadequancy of facilities probably all contribute, in the majority of schools, to this situation.

Hours of Library Service

While an open library is not necessarily an accessible library, a closed library clearly prevents the use of both the area and its resources. The following becomes an important question in this connection: "Is the school library open enough hours to really get the maximum impact and value from the financial investments of the community?" Secondary school libraries, in the survey of student reading and the high school library undertaken for the National Study of High School English Programs by J.R. Squire, were generally found to be open throughout the school day. "The average library in the 104 selected schools remained open seven and a half hours per day; but only during 17% of the time (i.e. before and after school) were all students free to visit the library."

School bus services and demands of public transport systems have restricted before and after school library service and in some schools eliminated it altogether. The longer school day becoming a feature of many school systems imposes a further restraint when associated with bus arrival and departure times. The study by Squire revealed that the libraries surveyed were open an average of almost twenty-seven minutes before school and fifty minutes after school. Significantly, a number of these selected high schools therefore provided less access than the average time stated, e.g., thirty-five of the 104 schools were open for only thirty minutes or less after the conclusion of classes.

Although lunch hours offer a possible opportunity for free individual access and most statements on school library hours appear to suggest that libraries are open at this time, no explicit information as to how widespread this practice is or how much actual use of it is made by students was found in the published literature. Lunch hours in secondary schools are, however, very brief indeed. A 1965 National Education Association survey found that the median lunch hours for junior high schools and senior high schools were thirty-four and thirty-three minutes respectively.

Schools, for reasons of discipline and movement control, may restrict student entry to the library even in this brief period of time. Again, with longer school days, with reduction or elimination of study hall periods in many schools, with increased course loads and more difficult content in some disciplines, and, with the demands of student social activities students may be unwilling, as well as unable, to use the library at this time. This area of opportunities for access and use by students during lunch hours is another requiring research.
Evening and Saturday availability of school library facilities, recommended by the American Library Association's Standards, and so frequently assumed in discussion, is perhaps less common than frequently assumed. The Office of Education's Statistics of Public School Libraries 1960-1961 indicated that at the time of this survey less than 2 percent of schools provided library service to high school students in the evening while approximately 1 percent offered Saturday service. No comparable recent survey is available. However statements from reporters in recent years support the view that the situation today is not significantly better. Squire noted that "a few libraries reported experimenting with evening schedules--two or three nights a week." Gaver and Jones indicated that "extended hours of library service (i.e., Saturday service in this part of the study)...were provided in a small number of schools," among thirty-four secondary schools in eighteen states whose libraries had been identified by state library supervisors as having a superior program of service.

A survey at the state level by Howell recorded a strong trend to evening library service in California schools. Eight percent of secondary schools had regularly scheduled evening library service and a further 7 percent were considering introduction of this service. However, he indicates that eighty-two schools formerly offering this service no longer provided it, giving as the major reason (71 percent) insufficient use by students. Additional reasons for the absence of extended hours and the "failure" of the program when introduced, are administrative indifference to planning extra hours and inability to pay the staff, inappropriate location of the library, problems of building security, and fear of student indiscipline.

A further report on selected secondary schools in California concluded that "Librarians were decidedly opposed to keeping the library open at night" believing that night openings were not justified in the light of student use. Lack of student use during extended hours of service was considered by Tabor to be "the most disheartening aspect...Many students do not avail themselves of the opportunity to use their own library outside of the school schedule." The same survey reports that of eighteen respondent schools selected for their programs of extended service, only four offered Saturday service--three in the morning and one in the afternoon. The extent of student desire to use public libraries rather than school libraries and the actual convenience of returning to school at night or on Saturday should not be ignored when evaluating student use of extended hours of school library service.

Enrollment in voluntary summer session programs is steadily increasing. Such programs could offer opportunities for the use of the school library not only to summer enrolled students but also to all the regular students of the school or district. There appear to be, however, no significant studies of the incidence, duration and extent of use of school library services during the summer vacation period. The possibility of twelve-month school library services has been raised but information on the implementation of this scheme is also lacking.

School Barriers to Access

An open library-media center permits potential use; extended hours make possible increased potential use. School policy and school organization may stimulate and insure or deter and prevent the realization of this potential. The total organization of the school, including educational objectives, curriculum content, teachers' attitudes and teaching methods, teachers' expectations of
students, course structure and student scheduling, affects the role of the school library and influences its effectiveness.

Through its patterns of organization, the school exercises ultimate control over the location of the student and the allocation of his time. When the school permits the student no choice in place or time of learning it also determines directly the nature and extent of almost all his accessibility to school learning resources. One valuable consequence of flexible timetables and modular schedules is the enhanced participation of the student in determining where, what, and when he will study, thus permitting him to manage his access to required materials at times appropriate to him. A conservatively organized school, in addition to rigid time and location decisions, may also exercise, through movement controls, further restrictions upon the convenience of student access. By means of corridor and library passes, closed lunch hours in school cafeterias and embargoes on entry to parts of the school before classes begin, further limitations may be introduced.21

The allocation of students to the library and the utilization of library space dictated by the administration of the school may build restrictions or limitations into the school's program which reduce the chances of the library responding effectively to the requests of teachers and the needs of students, particularly individual students. This may occur even when the intention is to provide a valuable access for some students.

Clearly the use of a library facility as a subject teaching room (i.e., in place of a normal classroom) to the exclusion of potential library users is always undesirable. However the regular scheduling of whole class groups to the library for group instruction may be equally so if it results in the exclusion of small groups and individual researchers. A separate library classroom would appear to be a better location for this activity. Similarly while the location of a "study hall group" in the library does give direct access to library resources to those students wishing to use them, it burdens the library space with numbers of students who do not wish to use resources from the library—and in fact, may not intend to use any materials at all. Because of this situation large numbers of non-library users in the library may prevent study and use of library resources by other potential library users who could be released for this purpose from subject teaching classes.

Fixed and Flexible Schedules

One major factor determining the extent of access is the inflexible school timetable which does not include provision for "periods of study." Such "periods of study" may be provided by fixed study hall periods, regular use of part of scheduled teaching time, opportunities for independent studies, or by scheduling large blocks of unassigned time to students learning in a "team/teaching/individual study" setting. Obviously the type of provision made, in accordance with the general philosophy and objectives of the school, will vary from school to school. What is important is that some type of "period of study" provision be made for every student, preferably each day. As J. Lloyd Trump suggests:

This same schedule, plus the unusual teaching methods in self-contained...classrooms, also keep most students from effective independent study in the traditionally organized library. It is difficult to get to the library; it is even more difficult to stay there very long.22
A 1964 survey by Vredevoe and Goff on access to some seven hundred school and college libraries concluded that, "The student day in too many schools is so filled with classes that he is unable to use the library in pursuit of his independent study and research."\(^{23}\)

In 1966 McJenkin commented on the effects of the lack of time to use the school library within the school day and before and after school hours: "Individual schedules do not include time for group or independent study."\(^{24}\)

The consequences for individual access to resources, of inflexible schedules without regular study opportunities, are clear. Unless resources are brought to the classroom (and time made available to use them) or out-of-school-hours service is offered, students do not make even minimal contact with the resources of the school's library-media center. In such situations some teachers may, on occasion, bring whole classes, send groups, or allow selected individuals to go to the library. While valuable, these opportunities tend to be too irregular and are to be viewed as supplementary to the teaching and incidental to the learning processes.

Flexible scheduling allows variation in the number of periods for different subjects, variation in the total number of subject periods per week and thus variation in the number of "subjects" or activities each student can undertake. With these three variables operating, school organization becomes more complex, but a significant increase can occur in the opportunities for individual study. Further flexibility results from the use of variable numbers of units, or modules, of time to create a "period" of variable length. Instead of the invariable fifty-minute period for all subjects and for every activity of each subject, the period length can be structured to meet the specifications of the particular learning activity planned.

Introduction of increased student choice of electives and options and the reduction of the number of required courses, together with opportunities for independent studies designed and performed by students, further diversify the patterns of student activity.

There are generally two consequences of such scheduling innovations which directly affect student access to study areas and learning resources. First, the amount of time the student "is taught" is reduced and he thus receives more time in which he may perform individual study. Second, as increased numbers of students are given more unassigned time the school must plan and provide a variety of study type areas and a range of locations with appropriate learning resources to meet the needs of students. Such conditions simultaneously offer a challenge and an opportunity for the satisfaction of new student needs by the school library. Subsequent sections of this study discuss the implications of these school organizational changes for school library service.

Eleanor Ahlers, in a survey of the changing concept of library service in 1965-1966, was concerned that in many schools with newer patterns of school organization these library opportunities had not yet been realized:

\begin{quote}
The impact of new trends and innovations relating to structural changes in flexible scheduling, non-graded instruction, variations in class size, and to the use of human resources in team teaching and independent study has in only relatively few instances brought about a changed concept of the library staff, facilities, materials and program.\(^{25}\)
\end{quote}
Study Periods and Study Halls

It is not proposed to argue the case for or against "study hall periods" here, but it must be recognized that study hall periods (in the library or with effective and convenient access to the library) do permit possible individual use of library resources. However, as has been suggested above, this use of the library as a study hall inhibits individual and incidental use of the library's resources by staff and other students, including whole classes, small groups and individuals.

In 1964, 86 percent of a sample of secondary schools scheduled at least one study hall period daily for most pupils. Where study period opportunities are given in the form of "study hall periods," by careful planning the school can maximize their effectiveness and minimize restrictions on general access to the library. Students, allocated an optimum number of study hall periods in relation to their maturity, ability and course requirements, can be assigned study areas adjacent to and with direct access to the library but not assigned to the library as a group. Where study halls must be located some distance from the library a minimum of restrictions should be made on the movement of students to the library. Adequate seating at individual study tables, sufficient library resources and the guidance of subject specialist resource personnel should be required.

Changing concepts of high school education, revised classroom techniques and the changing character of the student body, have, however, forced a reevaluation of the role of effectiveness of "study hall periods." Today's secondary schools appear to be tending to reject the concept of a study hall period (and often the library as the study hall location also), some absorbing the time into fewer but longer teaching periods or into additional required courses, while others are introducing flexible timetables with up to 40 percent of a student's time for individual study in a variety of study and resource locations through the school.

Squire concluded from his study that "the problem of accessibility is acute... these suburban schools are the very institutions that are reducing study halls and increasing the work-load of college-bound students, thus providing them less opportunity to visit the library."

An American Library Association report, Student Use of Libraries, commented on school and community consequences of the cessation of study hall periods without the substitution of other opportunities for individual study. The report suggested that students denied access to school libraries during the day and finding the school libraries generally unavailable at night, would turn to community libraries for resources which should be available through the school.

These newer attitudes to study hall periods have been reflected in the design of contemporary schools. A commentary on the 1966 American Association of School Administrators' buildings exhibit of secondary schools noted that in regard to newly designed schools "the study hall that was common in most high schools a decade ago has almost gone by the board. It has been replaced by student carrels, seminar rooms, reading lounges, and more extensive library and research facilities."

It appears clear however, that in many schools which have abolished study hall periods without provision of alternative opportunities of access to library resources, or which have eliminated the study hall location without establishing
other adequate and effective areas of study proximate to library resources, students have considerable difficulty in utilizing libraries and library services.

**Library Barriers to Access**

Inadequacies of library space and facilities are the most obvious and the most frequently described deficiencies of the library which prevent effective access for individual research and reading. Insufficient resources have also been noted and reported. For these components there are accepted standards. Schools may easily assess their own adequacy in the light of these standards. Two relevant comments are noted, as indicative of the need for further research, in this area.

Alexander and Hines in a 1966 report on independent study in thirty-six secondary schools which had significant independent study programs, concluded on the basis of ratings by administrators and teachers that "school libraries...had good to excellent collections of library materials but they suffered from lack of work space for students and...were inadequate in the highly specialized materials needed for some independent study projects."\(^3\)

A recent National Education Association survey based on a sample of secondary schools throughout the United States reported that individual study carrels were not provided in 87 percent of secondary schools in all systems enrolling 300 plus students. Even in secondary schools in systems enrolling 25,000 plus students 70.7 percent of the schools did not possess individual study carrels.\(^3\)

Less frequently reported, however, are the restrictions which result from the objectives, attitudes and activities of the librarian and the library staff. Understandably perhaps there is little evaluative discussion in the literature of what appear to be quite obviously desirable practices based on accepted principles of school library service. Nor do individual librarians publicize deficiencies in their own libraries--administrators and teaching sometimes do so however. Yet observation of school libraries by this author would suggest that they can markedly reduce potential access on the grounds of "library organizational needs" or "standard library practice." Among such practices are--unnecessary restrictions on access to some types of materials; over-large reserve collections; inadequate library and shelf guides for location of materials; closed stacks of books; unavailable audiovisual materials; loan periods which are too brief or too inflexible; time-consuming loan systems; undesirable restrictions on the loan of some types of non-book materials; unwillingness to lend items to classrooms and to students for school vacation use and closing school libraries for necessary stock checking.

Within the educational environment of the school, the extent and value of student access to the library-media center is determined by the hours of library service, by the opportunities offered by the students' schedules, by the provision and location of study periods and by the extent to which the school and the library eliminate barriers and initiate incentives to use library resources and individual study areas.
THE CHANGING SECONDARY SCHOOL

During the late nineteen-fifties and the early and middle periods of this decade the pace of educational change quickened. The changes in philosophy and practice produced new demands and opportunities but often led to new difficulties in gaining access to and using library resources.

Among these changes are: new objectives emphasizing achievement in discipline-oriented subject study; increased individual responsibility for learning; new patterns of school organization; new teaching roles and modes; changes in the size and composition of student groups; development of nongraded classes, individual progress and programmed instruction activity; the emergence of a more mature and more demanding student body; and the steady development of new products of educational technology. All changes in the school—in its organization, teaching staff and student groups—influence the school library. Attention can be directed here only to a small number of those changes—those which are most relevant to the question of student access to library-media center resources in secondary schools.

In the more innovative schools significant changes have occurred in the time and location of education—and even more are likely to occur with further developments in electronic education. While there have been some over-all increases in the length of the school year and school day and in the number of students participating in summer programs, the major changes affecting most students are those which have resulted from a reallocation of time-use during the school day. Less emphasis on teaching and on learning in self-contained classrooms has directed more attention to study areas and learning resources. Indeed this locational change has gone beyond the school and some administrators are thinking in terms of community learning environments outside the school itself. Some senior secondary school students not only undertake college-level courses but also attend part-time on the college campus.

A variety of substitutions for the traditional study hall location have been developed. Some schools have constructed or remodelled study areas adjacent to the library with direct access to the library-media center's resources, others have developed a centralized resources area but with departmentalization of materials by subject. Another pattern has led to dispersed satellite subject-resource centers located in the teaching-learning area for that activity. One interesting design at Medford, Massachusetts, provides for departmentalized satellite resource centers located in the teaching areas but placed immediately above the central instructional materials center and connected with it by a special elevator. Whatever pattern is developed must provide both for centralized administration of resources and reasonable proximity to the specialized teaching areas of the school.

This writer favors a centralized administration and location of resources with the necessary "subject-type" and "materials-type" special areas adjacent to the main instructional materials center. Under this plan the library-media complex could well form a "starfish pattern" with appendage resources centers extending into the instructional areas of the school. There would still be a need for study facilities in a number of the teaching areas of the school and in most cases these study facilities would possess basic reference books and small study collections made available from the central instructional materials center.

Effective use of the areas provided depends on scheduling. Flexible and modular scheduling, in part or fully implemented, appear to be gaining ground in
secondary schools. As a result there are generally more opportunities for students to use libraries during the school day.\textsuperscript{34}

Many scheduling changes and curricular innovations have had as a key concept the extension of independent study.\textsuperscript{35} The effects of such schedule changes are well described by Margaret Hayes Grazier:

Scheduling innovations such as flexible or modular scheduling affect the library directly and indirectly. Indirectly, flexible scheduling makes possible team teaching, and... increased demands for individual study. Directly, flexible scheduling gives the student free time to work in the laboratories or the library. The most noticeable effect on the library of flexible scheduling is on its space.\textsuperscript{36}

Associated with increased individual responsibility for the utilization of time are: more "free" time for students, more variety in study locations, a greater range of courses offered, possible independent studies and thus increased need as well as more realizable opportunities to use library resources.

Failure of schools to anticipate the effects of the need for additional space has produced expedient "solutions" to the problem. These sometimes involve the decentralization or dispersal of resources without maintaining necessary administrative controls and optimum access for all students.

In addition to time and locational changes in school organization there have been changes in teaching modes. Team teaching in large instructional groups, small group discussions and individual study (up to 40 percent in those schools which have fully implemented the proposals of J. Lloyd Trump)\textsuperscript{37} have combined adequate availability of time and sufficient motivation for the student to utilize library resources. It appears likely that further educational technology will force additional changes in teachers' roles, the locations for learning and evaluations of the objectives and techniques of teaching and learning.\textsuperscript{38} When such situations occur the library and its staff will develop by merely supporting the curriculum and teachers through providing resources and becoming really involved in the instructional process. It will be in the library and study centers that much of the teaching will be planned, teaching materials produced, and student learning performed.

Individual study and independent studies appear to offer the library both the greatest opportunity and the greatest challenge to efficiently meet the demand for a variety of materials and to provide space in which to use them. As students progress from teacher-assigned individual study of specific, defined information through directed study, and student projects, to independent study with its concomitant fully individualized research which should be student initiated and self-directed, then the demand for materials, service, and access compatible with student needs will be more insistent.

Alexander and Hines concluded: "It would seem that the most important single facility for independent study in almost all areas is an adequate library." Having stated this, however, they then point out that "the new media, including newer developments in technology seem to have had only a modest impact on the independent study student."\textsuperscript{39}
Radical changes in school organization will develop expectations for matching changes in school library service; design and organization of centers; availability of resources; and staff differentiated in education, experiences and function. Complete involvement by library staff in the educational objectives, planning and programs of the school will be essential.

SECONDARY SCHOOL LIBRARY RESPONSE

TO CHANGING SCHOOL ENVIRONMENTS

Effective response by the library will, in almost all cases, require additional space and staff as well as greater resources and more equipment. Administrative decision-making and approval must precede the implementation of such requirements.

Having acquired these prerequisites the librarian will be cooperatively concerned with school administrative and teaching staff in new patterns of organization which will make the areas, facilities and resources acquired more conveniently accessible to more students over an optimum period of time. Basic to such planning is a new concept of the role of the library-media center in making information and media services actively available. Emery sees the library of the future as a "system of services" rather than an organization of resources. 40

Planning to respond to changing school environments will include consideration of the need to make the areas, the materials, the information, and the services more accessible to more students.

Increased space may result from the construction of additional space or the more efficient use of existing space within the library and within the whole school. By differentiating the uses students make of library areas and library resources it will be possible to direct students to the most efficient place to achieve specific objectives. This will lead students to subject resource centers, departmentally located study areas, laboratories, conference rooms, teachers' offices and perhaps relaxation areas, rather than the central instructional materials center, for certain activities. With this new differentiation of purposes of study comes a new concept of study areas. The old undifferentiated study hall is replaced by a series of study areas, some in the main library center, some in specialized library areas and some outside the central instructional materials center altogether.

A further saving in space, together with other educational advantages, will result from more efficient modes of library orientation and library instruction: these will involve closed circuit television to classroom groups, large group instruction and programmed instruction with teaching machines. 41

Ellsworth and Wagener highlighted the need for sufficient individual seating in study carrels in their 1963 study:

We would start by providing each student with a study carrel base...where he would work with all types of carriers... if the student were to spend 40 percent of his time in independent study, the school would need to make only double assignments of each carrel. 42
Assuming then that the school figures—as it should—on seating at least 30 percent of its enrollment in the library...reader space should be apportioned as follows: study carrels—60 percent...e. 18 percent of the total school enrollment.  

A more recent estimate suggests that "future school libraries should be planned with individual accommodation for as many as 75 percent of their readers."  

This writer believes that if individual study which results from the flexible schedule is to succeed, the proportion of carrels to total study places must be increased, perhaps to 80 percent of the seating locations in the instructional materials center, and that planning should include provision for an increase in over-all study places in the instructional materials center to 40 percent of the school enrollment. This is, however, another of the areas requiring detailed research. Bishop estimated that at Claremont High School in California, providing independent study opportunities in a variable class scheduling organization "50-500 students during any particular period of time must be provided with appropriate out-of-class study facilities...."  

While schools are still functioning on relatively inflexible scheduling patterns it is essential that freer individual access to resources and areas be achieved. Unnecessary barriers to accession are sometimes introduced by school closure of certain areas at particular times (such as attendance checks to control movement and for disciplinary reasons or by the issuance of library passes). Elementary schools release students to go to libraries without employing such movement controls and it should be possible for secondary schools either to modify present practices by introducing honor systems or "season tickets" to utilize computer assistance in controlling attendance records or to attempt by other means to remove the underlying causes of student behavior which these library-impeding systems are designed to curb.  

"Whatever administrative arrangements are made have as their basic purpose to facilitate the use of the materials by the pupils." J. Lloyd Trump has fairly stated the problem: the library and instructional materials staff must respond by new indexing, guiding, organization, storage and circulation procedures to maximize the convenience of this use. One materials organization development of interest is the construction of learning activity packages at Nova High School, Fort Lauderdale, Florida. Such a package combines multi-topic, multi-media, multi-level groupings of resources providing for student choice in topic content, form of presentation and level of treatment based on the principles of instructional management with identification of behavioral objectives, sequential learning activity and learner evaluation.  

Essentially, however, it is the information in resources which must be made more effectively accessible. This concept will lead, perhaps, to the most radical changes in materials organization in instructional materials centers. Electronic information systems, and particularly dial access to information, will emphasize access to information rather than to the library. Vredevoe and Goff suggest that the information center may retain the resources in its master files reproducing the information as image or sound on request and when required producing a microfilm or microprint for the reader to check out. Eatough considers "the traditional library, along with the traditional self-contained classroom it serves, will tend to atrophy as their functions become more limited." He envisages the development of knowledge resource centers with three types of materials: traditional print and non-print materials, disposable materials (paperbacks and
mimeographed materials) and audio-visuals which are transmitted electronically to
the viewer. Bringing the information to the student rather than sending the
student to the resources is the essence of this system.51 L. H. Freiser's system-
wide information service supplements resources of secondary libraries in Toronto
by providing students on request with retainable copies of extracts from books and
periodicals held in the central information center.

With maximum access to information once achieved, the responsibility of the
librarian for insuring maximum access to the "information services" will be en-
hanced. Additional assistance will be given students in evaluating the likely
relevance of sources, interpreting, synthesizing and recording information and
advising on the breadth and depth of search in the light of defined research ob-
jectives.

To achieve these goals the librarian will need to develop a program of con-
tinuous evaluation--self-evaluation, staff comment and student suggestion--and then
to use this feedback to maintain the relevance of planning. The efficiency of
present access will be statistically recorded and assessed, staff and student re-
quests will be sought and new needs, arising from educational changes, anticipated.
The need to involve students is vital. Planning for extended hours of services at
East Peoria Community High School, Illinois,52 and at Brookhurst Junior High School
at Anaheim, California,53 appears to have been successful because of the willing-
ness by their libraries and administration to consider student requests as a basis
for the implementation of a new program.

An accurate, analytical overview of the extent of present services and their
use by students is a prerequisite to planning modifications in organization and
amendments to service. Such an overview was provided by A Planning Guide for the
High School Library Program produced by Henne, Ersted and Lohrer in 1951.54 Some
revision and addition to this guide would now be required to incorporate more
recent developments in education and school organization. The introduction of new
standards for school media programs could well serve as an occasion for the
production of a new planning guide in terms of those standards. If this should
result it is suggested that an accurate evaluation of the quality and quantity of
student access to the areas, resources, information and services of the in-
structional materials center would be an essential component.

The appendix presents an interview-questionnaire designed to measure access
factors. The questionnaire was prepared for completion by the interviewer rather
than by the librarian of the school so that understanding of the question by the
respondent could be assured and uniformity of the form of the answer achieved.
This method also made possible the modification of questions to insure relevance
to the pattern of organization in each school. Indeed, during the period of de-
velopment of this instrument and its testing in three schools some significant
changes were made in its structure. Use of this questionnaire could indicate to
the librarian and the school staff the complexity of problems of access to library
resources and services and the close relationship of access to the pattern of
school organization. With this information and understanding, more effective
planning could proceed.

CONCLUSION

Student access to school library-media center areas, resources, information
and services is a prerequisite to use. The concept of access developed in this
paper is one in which the student does no merely find access possible but is stimulated to achieve convenient, efficient and satisfying access. Extent and value of access are products of the library's or media center's response to staff and student needs within a particular pattern of school organization. An open library, proximate to student and teacher areas, with adequate resources organized for use within and outside the school is the basis on which accessible services are built. Barriers to access, developed by the school, teaching staff, library organization or student attitudes are replaced by positive programs planned cooperatively to achieve maximum access to a particular school. It is essential that a complete evaluation of present opportunities for access and extent of student use should precede planning and that this evaluation should be developed in the light of a broad concept of access and in relation to accepted standards of service.

Changes now occurring in school environments are affecting the nature and ease of student access. The success or failure of the library's response to new needs demanded by innovative secondary schools which have made fundamental changes provides valuable information to other schools considering similar modifications in school organization. While many of the innovations produce problems, and may even create some immediate barriers to access, they also offer potential opportunities for more effective access which must be discussed and realized in action.

These problems have not as yet been fully discussed in the literature of education and library science nor have effective instruments of measurement of access been generally developed. Current research into the relationship of school organization and student access to resources is sparse and usually based on the situation in one school.

Some emerging patterns of successful library response to new but different school environments, e.g. Ridgewood, Oak Park-River Forest and Evanston High Schools in Illinois, are sufficiently developed to offer guidelines for both research and planning in other schools. In these schools, barriers are being discarded and comprehensive programs developed to give students the maximum access to areas, resources, information and services of innovative library programs.

Educational technology will undoubtedly produce changes in the type of and time required for access. What will remain constant will be the relationship of school objectives and organization, and the library's or media center's response to the needs of those who are teaching and learning. Accessible libraries will not merely be open but actively involved in the total instructional and educational program of the school because administrators, teachers and students, as well as librarians, will recognize their essential role in both teaching and learning.
APPENDIX

STUDENT ACCESS TO SECONDARY SCHOOL LIBRARIES AND LIBRARY RESOURCES:
AN INTERVIEW-QUESTIONNAIRE

Designed for administration by an interviewer in discussion with school administrative and library staff, this format lists the key questions in shortened form, not necessarily providing space for the replies and comments of respondents.

1.0 GENERAL INFORMATION

1.1 School name; type; grade range.

1.2 Enrollment; number of teachers.

1.3 School commences...; school concludes at...each day.

1.31 Length of school day; number of periods; length of each period.

1.4 Number of study hall locations.

1.41 Other study areas in the school (outside the library).

1.5 Library areas for student use. Detail type and over-all capacity.

1.51 Library locations in relation to study hall areas.

1.52 Location of staff services in relation to the library.

1.53 Library location in relation to student services.

1.6 Library seating capacities. Detail numbers and types.

1.61 Non-library usage of library accommodation.

1.7 Library staffing--general comments.

1.71 Professional staff--number.

1.72 Para-professional staff--number.

1.73 Clerical staff and aides--number.

1.74 Student assistants (employed)--number.

1.75 Student assistants (volunteers)--number.

1.8 Orientation periods--to media areas and resources.

1.81 Orientation periods--grades served.

1.82 Orientation periods--number and duration of periods.
1.83 Orientation periods--objectives and content of periods.
1.9 Bus transport of students.
1.91 Bus transport of students--percentage carried.
1.92 Bus transport of students--arrival and departure times.

2.0 LIBRARY OPEN TO STUDENTS
2.1 Before school--detail days open and duration.
2.2 After school--detail days open and duration.
2.3 Evening access--detail days open and duration.
2.4 Saturday access--give duration of time.
2.5 Lunch hours open--give duration of time.
2.6 Summer vacation--give duration of time.
2.7 Short vacations--give duration of time.

3.0 LIBRARY PERIODS Periods scheduled as regular "library periods" at that time each week.
3.1 Library periods as defined above are provided.
3.2 Grades scheduled.
3.3 Frequency; duration of periods.
3.4 Program content; written program.
3.5 Evaluation of program.
3.6 Classroom preparation for and follow-up.
3.7 Class teacher accompanies class.
3.8 Class teacher participates in library activity.
3.9 Librarians' views on scheduled library periods.

4.0 LARGE GROUP USE OF LIBRARY AREAS
4.1 Initiation of use by teachers; by librarians.
4.2 Procedure for scheduling and recording use by large groups.
4.3 Role of teachers in planning and participation.

4.4 Purposes of visits. Details required.

4.5 Duration and frequency of visits.

4.51 Frequency of visits by grade level.

4.52 Frequency of visits by stream or track level.

4.53 Frequency of visits by subject type.

4.6 Are patterns of use recognized and recorded.

4.61 Are checks made to ascertain classes which rarely schedule large-group use.

4.62 What follow-up action follows information received on questions indicated in 4.6 and 4.61 above.

4.7 Within the last month have whole class groups wishing to use the library been excluded because available space was filled by:
   (a) similar class groups.
   (b) study period groups.
   (c) "subject teaching" classes.
   (d) individual students undertaking research or reading.
   (e) small class groups.

5.0 SMALL GROUP USE OF LIBRARY AREAS

5.1 Initiation of use.

5.2 Procedure for scheduling use.

5.3 Teachers' role in this activity.

5.4 Purposes of such groups in the library.

5.5 Duration and frequency of visits.

5.51 Frequency of visits by grade level.

5.52 Frequency of visits by stream or track level.

5.53 Frequency of visits by subject type.

5.6 Problems of small group use of library areas.

5.7 Within the last month have small groups from classrooms wishing to use the library been excluded because available space was filled by:
   (a) large class groups.
   (b) study period groups.
   (c) "subject teaching" classes.
   (d) individual students undertaking research or reading.
   (e) other small class groups.
6.0 INDIVIDUALS USING THE LIBRARY

6.1 Procedures for access from classrooms.

6.11 Procedures for access from study areas outside the library.

6.2 Limitations on access—general.

6.21 Limitations on access—imposed by space.

6.22 Limitations on access—imposed by time.

6.23 Limitations on access—imposed by teachers.

6.24 Limitations on access—imposed by school organization.

6.25 Limitations on access—imposed by pass systems.

6.26 Limitations on access—imposed during lunch hours.

6.27 Limitations on access—imposed before or after school.

6.3 Library policy and organization limitations on individual use—general.

6.31 Facilities of the library which students may use.

6.32 Facilities of the library which students may not use.

6.33 May students use class textbooks in the library?

6.34 May students perform home assignments in the library?

6.35 May students operate A. V. equipment in appropriate library areas?

6.4 Number of students coming as individuals to the library each day. (average daily total)

6.41 Individual use before school. (average daily total)

6.42 Individual use after school. (average daily total)

6.43 Individual use during lunch hours. (average daily total)

6.44 Individual use during class periods. (average daily total)

7.0 STUDY PERIODS AND LOCATIONS

7.1 Are study (hall) periods scheduled for whole class groups.

7.2 Location of study hall areas—general.

7.21 Location of study hall areas—in the library.

7.22 Location of study hall areas—in the auditorium.
7.23 Location of study hall areas--in the classrooms.
7.24 Location of study hall areas--in other areas.
7.3 Do Librarians supervise study hall periods
(a) in the library.
(b) in other areas.
7.4 Scheduling of students for study hall periods--general.
7.41 Are all students scheduled for regular study hall periods.
7.42 Grade patterns of students allocated study hall periods.
7.43 Stream or track patterns of students allocated study hall periods.
7.44 Ability levels of students allocated study hall periods.
7.45 Subject patterns of students allocated study hall periods.
7.5 Detail student groups which receive one study period daily.
7.51 Detail student groups which receive more than one study period daily.
7.52 Detail student groups which receive no study periods weekly.

8.0 ACCESSIBILITY OF MATERIALS
8.1 All items are on open shelves.
8.2 Some items are on short term loan reserve.
8.3 Some items are not available for circulation.
8.4 Audio materials may be used by individual students.
8.41 Audio materials may be borrowed by individual students.
8.5 Visual materials may be used by individual students.
8.51 Visual materials may be borrowed by individual students.
8.6 Detail materials not available for circulation.
8.7 Loan policy--general.
8.71 Loan policy--books, number and duration of loan.
8.72 Loan policy--periodicals, number and duration of loan.
8.73 Loan policy--other print items, number and duration of loan.
8.74 Loan policy--audio materials, number and duration of loan.
8.75 Loan policy--visual materials, number and duration of loan.
8.8 Resources may be borrowed--any time library is open.
8.81 Resources may be borrowed--during short vacations.
8.82 Resources may be borrowed--during summer vacations.
8.83 Resources may be borrowed--for use over short vacations.
8.84 Resources may be borrowed--for use over summer vacations.
8.9 Resources are loaned to classrooms--general.
8.91 Resources are loaned to classrooms--for short periods.
8.92 Resources are loaned to classrooms--on long term loans.
8.93 Classrooms have fixed library collections.
8.94 School has fixed departmental library collections.

9.0 ADMINISTRATIVE ASPECTS OF LIBRARY ACCESS
9.1 System policy on access to school libraries.
9.2 School policy on access to the library.
9.3 Principal's views on access.
9.4 Department chairmen's views on access.
9.5 Teachers' attitudes to access.
9.6 Librarians' comments on student access to the library.
9.61 Librarians' comments on student use of the library.
9.62 Librarians' comments on student loans from the library.

10.0 SUMMARY AND EVALUATION
10.1 Estimated total daily attendance of students in the library.
10.2 Estimated total daily loans of all items from library collections.
10.3 How many whole class groups use the library daily.
10.4 How many small class groups use the library daily.
10.5 Major use of library areas.
10.51 Scheduled class groups for library directed instruction or research.
10.52 Whole class groups accompanied by teachers for subject research.
10.53 Part class groups from classrooms.
10.54 Study (hall) groups assigned to the library.
10.55 Readers arriving individually for individual study.

11.0 ADDITIONAL ASPECTS OF ACCESSIBILITY

11.1 What student access is offered to school-located electronic learning centers and information retrieval centers.
11.11 Hours of operation of centers.
11.12 Seating capacity of such centers.
11.13 External telephone access to such centers is available from ... (A.M./P.M.) to ...(A.M./P.M.).
11.14 Types of dial access offered
(a) on-line access.
(b) random access.
11.15 Types of communication forms offered
(a) audio.
(b) visual.
(c) audio and visual.
11.16 Detail other aspects of access to this center.

11.2 What cooperative arrangements operate within the area for a group of schools to offer extended hours of service in one school to serve all students of the area?

11.3 What student access, direct or indirect, is offered to:
(a) District or regional resource centers of materials for reference, loan or print-out copies of materials.
(b) District or regional information retrieval centers by telephone link.
(c) Telex links (or other communication channels) to further information center.
(d) Computer facilities for use by students.

11.4 Detail access to other information sources not covered above.
REFERENCES


2. Ibid., pp. 87-90.

3. Ibid., pp. 92-93.


6. Ibid., pp. 11-19.


18. Ibid., p. 10.


34. McJenkin, V., op. cit., p. 16.


36. Ibid., p. 21.


44. Hartz, F. R., *op. cit.*


VITA

Lawrence McGrath is state superintendent of School Library Service, Education Department of Western Australia, Perth, Western Australia. He received his B.A. degree in 1957 and his graduate diploma in Education in 1959 from the University of Western Australia, his graduate Diploma in Librarianship in 1963 from the University of New South Wales and the degree of M.S. (L.S.) in a sixth year Advanced Masters Program from the University of Illinois in 1969. He was awarded an Australian-American Educational Foundation Travel Grant for study and observation in the United States for 1968.

After completing teacher training at a state teacher's college, McGrath taught in elementary schools from 1950 to 1952, and in secondary schools from 1953 to 1961. During the latter period he taught social studies, served as a school librarian for five years and headed the History Department in a senior high school. He was appointed to his present position in 1963. While on study leave in 1968 and the first part of 1969, he was a graduate assistant and teaching assistant at the University of Illinois, a research associate in the School of Librarianship at Western Michigan University and assistant to the director of the H.E.A. Institute on "Standards for School Media Programs" conducted at Western Michigan University in May, 1969.

Mr. McGrath has served as national president of the Children's Libraries Section of the Library Association of Australia (1964 and 1965) and state divisional president of the School Libraries Section of the Library Association of Australia (1967). In 1967 he was appointed for a three-year term as the national representative of school library services on the Australian Advisory Council on Bibliographical Services.

Chairman of the Advanced Seminar on School and Children's Libraries conducted at the Royal Melbourne Institute of Technology in Victoria in August 1964, he taught courses in school and children's libraries at Perth Technical College in 1965 and 1967. He is a member of the Library Association of Australia's Committee on the Training of School Librarians and the Committee on Federal Aid to School Libraries.

He is a member of the American Library Association, the Australian College of Education and the Library Association of Australia and the author of articles in education and library journals. His study of Central Library Services of the Education Departments of the Australian States was published in 1965.
Papers in this series are issued irregularly and no more often than monthly. Numbers 52, 58 Revised, 61 through 66, 71, 72, 77, 81, 86, 93, and 96 are available at $1.00 per copy. Individual copies of other back issues still in print are distributed free upon request. The Occasional Papers deal with any aspect of librarianship and consist of manuscripts which are too long or too detailed for publication in a library periodical or which are of specialized or temporary interest. Manuscripts for inclusion in this series are invited, and should be sent to the Editor, Occasional Papers, Publications Office, University of Illinois Graduate School of Library Science, Urbana, Illinois 61801.

PUBLICATIONS BOARD

Herbert Goldhor, Chairman and Editor
Barbara Wallen, Assistant to the Editor
Walter C. Allen, Alice Lohrer
Robert B. Downs, Rolland E. Stevens
Frances B. Jenkins, Lucien W. White